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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/530,386
Filing Date: April 27, 2000
Appellant(s): KLEIN ET AL.

Stephen T. Boughner
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/22/05 appealing from the Office action mailed 10/22/04.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,806,003	Jolma et al.	9-1998
5,729,557	Gardner et al.	3-1998
6,069,884	Hayashi et al.	3-2000
5,465,399	Oberholtzer et al.	7-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 18-20, 24-29 and 31-35, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al. (US Patent 5,806,003) in view of Gardner et al. (US Patent 5,729,557), in view of Hayashi et al. (US Patent 6,069,884) and further in view of Oberholtzer et al. (US Patent 5,465,399).

Regarding to claims 18, 20 and 32, Jolma et al. disclose a method for connection setup for mobile stations of a radio communication system having at least one base station, comprising the steps of:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations (see col.3 lines 39-47 and col.4 lines 39-40).

in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction (see col.3 line 65 through col.4 line 2); and

in the mobile station, setting a transmission power dependent on the measured reception power of the base station (see col.2 lines 30-39).

Jolma et al. fail to disclose sending an access radio block to the base station.

Gardner et al. disclose sending an access radio block to the base station (see col.4 lines 51-60). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. with the above teaching of Gardner et al. in order to provide power transmission in different code rates and applying convolutional codes to data having a block structure.

The modified Jolma et al. fail to disclose the codes are used to separate information connections between the base station and mobile stations; wherein the signal transmitted in the downstream direction is a pilot signal.

Hayashi disclose the codes are used to separate information connections between the base station and mobile stations (see col.1 line 38 through col.3 line 60); wherein the signal transmitted in the downstream direction is a pilot signal (see col.1 lines 60-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. and Garder et al. with the above teaching of Hayashi et al. in order to provide differentially-coding information indicative of one of plurality of the antennas to be used.

The modified Jolma et al. fail to disclose if the access radio block has not been successfully detected, a new access radio block is sent by the mobile station with increased power.

Oberholtzer et al. disclose if the access radio block has not been successfully detected, a new access radio block is sent by the mobile station with increased power (see abstract and col.6 line54 through col.7 line 33). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jolma et al. with the above teaching of Oberholtzer et al. in order to provide variable transmission power capability to ensure reliable communication between transceivers.

Regarding to claim 19, the modifies disclose the radio communication system is configured as a TDMA/CDMA radio communication system, plurality of connections between the mobile frequency channels information of different connections can be distinguished from one

another according to a connection-individual fine structure. Whereby information of are simultaneously transmitted stations and the base station in formed by time slots, whereby the information of different individual codes (see Hayashi, col.1 line 38 through col.3 line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jolma et al. with the above teaching of Hayashi et al. in order to provide multiple access diversity transmitting wideband signals via a communications system adapted for transmitting narrow-band signal.

Regarding claim 24, the modified Jolman et al. disclose the signal transmitted in the downstream direction is a training sequence signal (see Hayashi, col.1 lines 44-67). "pn codes pilot signal" reads on "training sequence signal".

Regarding claim 25, the modified Jolman et al. disclose the signal transmitted in the downstream direction is a data signal (see Jolman et al., col.2 lines 25-27).

Regarding claims 28-29, the modified Jolman et al. disclose at least one auxiliary information is inserted into the signal sent in the downstream direction, this being employed by the mobile station for setting the transmission power (see Gardner, col.3 lines 50-63).

Regarding claim 31, the modified Jolman et al. do not mention about the access radio block is spread. Therefore, it is inherently that the access radio block is not spread.

Regarding claims 26-27, the modified Jolman et al. disclose the radio field attenuation (see col.4 lines 1-7). However, the modified Jolman et al. do not mention about setting the transmission power such that radio field attenuation is at least partially and/or completely compensated. Official notice is taken that the concept partially and/or complete compensation are well known in the art. It would have been obvious the attenuation of the received signal is

estimated, and on the basis of this, the mobile station is able to set the transmission power to partially and/or complete compensate the path loss during transmission ensuring high throughput data transmission.

Regarding claims 33-34, the modified Jolman et al. disclose all limitations as claim 1 above. More specifically, the modified Jolman et al. disclose a control panel for triggering the random access (see Garner et al., col.4 lines 50-60); a transmission power setting unit (see Gardner et al., col.6 lines 1-10).

Regarding claim 35, the modified Jolman et al. disclose all limitations as claims 1 and 22-23 above. Therefore, it is inherent for the modified Jolman et al. to include a measuring, transmission power setting circuitry for triggering the random access radio block to the base station to provide all functions as describe as claims 1 and 22-23 above.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al., in view of Gardner et al., in view of Hayashi et al., in view of Oberholtzer et al. and further in view of Gilhausen et al. (US Patent 5,485,486).

Regarding to claim 21, the modified Jolman et al. fail to disclose the mobile station sets the transmission power all the higher the lower the measured reception power is.

Gilhausen et al. disclose the mobile station sets the transmission power all the higher the lower the measured reception power is (see col.6 lines 42-64). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jolman with the above teaching of Gilhausen in order to provide the mobile station respond with a higher transmitted power to a high power cell.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al., in view of Gardner et al., in view of Hayashi et al., in view of Oberholtzer et al. and further in view of Bender et al. (US Patent 6,366,779).

Regarding claim 30, the modified Jolma et al. disclose everything as claim 1 above. However, the modified Jolma et al. fail to disclose the connection setup selecting a sub-range within said frequency channel.

Bender et al. disclose the connection setup selecting a sub-range within said frequency channel (see col.4 line 56 through col.5 line 7). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. with the above teaching of Bender et al. in order to provide mobile station connection without waiting from base station.

(10) Response to Argument

Regarding appellant argument, appeal brief filed 7/30/04 page 8, 5th paragraph, with respect to independent claims 18 and 33-35, appellant notes "the Examiner alleges that it is generally known that GSM system do not use a plurality of transmit antennas. Thus, one skilled in the art of GSM system would not look to the disclosure of Hayashi et al. fig.1 compared to Jolma et al. fig.1 where these clear differences are illustrated. However, the Examiner does not rely on Hayashi's antenna diversity transmissions". The Examiner relies on the Jolma et al., TDMA time slot, at least one control channel is dedicated to the mobile terminals seeking connection (see abstract) while Hayashi et al., a CDMA using the same frequency with the code division multiple accessing provided, although Jolma and Hayashi et al. are using different

signals structure but would be obviously combinable for the systems that are both providing connections between the base station and mobile terminals.

Appellant notes that, page 10, 2nd paragraph, "the Examiner has cited Oberholtzer et al. to disclose this feature and argues that been obvious to add the same to the combination of Jolma et al. and Hayshi et al. in order to provide variable transmission power capability to ensure reliable communication between transceivers. Similar to above, there is no particular support in the record for the applicability of this motivation of it's applicability to the Jolma et al. combination". However, there is a record for the applicability of this motivation of Oberholtzer et al. (see col.1 lines 10-15) and further evident to support variation of transmission power as necessary to establish a communication link between the base station and the mobile device (see Oberholtzer et al., col.7 lines 30-32).

The Examiner agree with appellant's argument, page 10, 5th par. through page 11, 2nd par., that "Jolma et al. already includes a mechanism to ensure the reception of the mobile station's...Regardless, even this potential modification of Jolma et al. would not disclose the presently claimed invention". However, the Examiner does not rely on the mentioned features, the Examiner cited Oberholtzer et al. for covering Jolma et al. deficiency of increasing power if the mobile device has not heard from the base station (see Oberholtzer, col.7 lines 17-20).

Regarding appellant argument, appeal brief filed 2/22/05, "wherein the signal transmitted in the downstream direction is a pilot signal", the improperness of this rejection and the lacking of a prima facie obviousness case for the same. It is well know that at the time of the invention was made, whether different type of systems GSM, CDMA or TDMA, the communications between the base station and the mobile device using pilot signal measurements for connection Taking

CDMA or TDMA base station network as an example, each base station to emit a constant signal-strength pilot channel pseudo-noise (PN) sequence on the forward link channel identified uniquely in the network by a pilot sequence offset and frequency assignment (see Hayashi, col.1 lines 44 through col.2 line 14) for the mobile device to detecting and establishing sufficient signal strength a communication link among base station and mobile devices (see Jolma et al., col.3 lines 57-64, Broadcast Control Channel could be a pilot channel that Hayashi et al. cover the silent of Jolma et al. about the pilot signal).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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